

CLAIMS

1. A method of video signal processing, comprising the steps of conducting three linear filtering operations on an input video signal to produce three filtered signals, each linear filtering operation comprising the taking of a weighted sum of pixels; and multiplying together said three filtered signals to produce an output video signal.
2. A method according to Claim 1, wherein said weighted sum is taken over pixels of the input video signal defined by a filter aperture.
3. A method according to Claim 2, wherein all three linear filtering operations have the same filter aperture.
4. A method according to Claim 1, wherein, for at least one linear filtering operation, the taking of a weighted sum of pixels includes the output pixel of the respective linear filtering operation.
5. A method according to any one of the preceding claims, wherein the product of two of said filtered signals is formed and a linear filtering operation conducted on that product, prior to multiplication of said product by the third filtered signal.
6. A method according to any one of Claims 1 to 4, wherein said three filtered signals are multiplied together without intervening filtering of the three filtered signals.
7. A method according to any one of the preceding claims, wherein a further linear filtering operation is conducted in parallel on the input video signal, with the result of said further linear filtering operation being combined with the multiplication product of said three filtered signals to produce an output video signal.

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8. Apparatus for video signal processing comprising an input terminal for receiving an input video signal; first, second and third linear filters each connected with the input terminal and arranged to provide an output through taking a weighted sum of pixels; a first multiplier for multiplying together the respective outputs of the first and second filters; and a second multiplier for multiplying together the respective outputs of the first multiplier and the third filter to produce an output video signal.

9. Apparatus according to Claim 9, wherein said weighted sum is taken over pixels of the input video signal defined by a filter aperture.

10. Apparatus according to Claim 9, wherein said three linear filters have the same filter aperture.

11. Apparatus according to Claim 8, wherein at least one linear filter is arranged to take a weighted sum of pixels which includes the output pixel of the respective linear filter.

12. Apparatus according to any one of Claims 8 to 11, wherein there is further provided a linear filter connected between the output of said first multiplier and the input to said second multiplier.

13. Apparatus according to any one of Claims 8 to 11, wherein there is a direct connection between the output of said first multiplier and the input to said second multiplier.

14. Apparatus according to any one of Claims 8 to 13, wherein the apparatus further comprises a linear filter path connected with the input terminal, and a combiner for combining the outputs of the linear filter path with the output of said second multiplier.

15. Apparatus according to Claim 6, wherein a filter is interposed between the output of the second multiplier and said combiner.

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